



TORQ Analysis of Cutting and Slicing Machine Setters, Operators, and Tenders to Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders




INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Cutting and Slicing Machine Setters, Operators, and Tenders	51-9032.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	51-9041.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

OUTPUT SECTION:

Grand TORQ:

88

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	 90	Level	 91	Level	 83

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Hearing Sensitivity	42	12	56	Active Listening	50	2	72	No Knowledge Upgrades Required!			
Static Strength	46	11	53								
Visualization	53	9	53								
Auditory Attention	50	8	56								
Far Vision	46	7	62								
Speech Recognition	41	7	56								
Rate Control	46	4	72								
Visual Color Discrimination	37	5	53								
Perceptual Speed	50	4	65								
Reaction Time	51	3	65								
Depth Perception	42	1	53								
Trunk Strength	42	1	50								

LEVEL and IMPT (IMPORTANCE) refer to the Target Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders. GAP refers to level difference between Cutting and Slicing Machine Setters, Operators, and Tenders and Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50



Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	Importance
Rate Control	42	46	72
Perceptual Speed	46	50	65
Reaction Time	48	51	65
Arm-Hand Steadiness	48	44	62
Far Vision	39	46	62
Manual Dexterity	46	46	59
Finger Dexterity	51	48	59
Control Precision	50	46	59
Multilimb Coordination	48	46	59
Near Vision	48	46	59
Problem Sensitivity	44	42	56
Information Ordering	48	46	56
Selective Attention	46	46	56
Hearing Sensitivity	30	42	56
Auditory Attention	42	50	56
Speech Recognition	34	41	56
Visualization	44	53	53
Static Strength	35	46	53
Visual Color Discrimination	32	37	53
Depth Perception	41	42	53
Speech Clarity	37	37	53
Oral Comprehension	48	46	50
Oral Expression	48	44	50
Deductive Reasoning	42	41	50
Category Flexibility	46	37	50
Trunk Strength	41	42	50
Stamina	34	34	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	Importance
Operation Monitoring	62	57	76
Operation and Control	63	55	74
Active Listening	48	50	72
Troubleshooting	63	53	72
Equipment Maintenance	68	58	69



Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	Importance
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Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders
10+ years	0%	4%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	0%	0%	Post-Masters Cert	0%	0%
4-6 years	1%	0%	Master's Degree	0%	0%
2-4 years	13%	4%	Post-Bachelor Cert	0%	0%
1-2 years	23%	28%	Bachelors	0%	0%
6-12 months	1%	44%	AA or Equiv	0%	0%
3-6 months	12%	0%	Some College	10%	0%
1-3 months	1%	0%	Post-Secondary Certificate	1%	9%
0-1 month	10%	0%	High School Diploma or GED	60%	77%
None	36%	18%	No HSD or GED	27%	13%

Cutting and Slicing Machine Setters, Operators, and Tenders

Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders

Most Common Educational/Training Requirement:

Moderate-term on-the-job training

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Job Zone Comparison

2 - Job Zone Two: Some Preparation Needed

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Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.

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These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.

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Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

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Tasks

Cutting and Slicing Machine Setters, Operators, and Tenders

Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders

Core Tasks

Core Tasks



Generalized Work Activities:

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

- Adjust machine controls to alter position, alignment, speed, or pressure.
- Change or replace saw blades, cables, cutter heads, and grinding wheels, using hand tools.
- Clean and lubricate cutting machines, conveyors, blades, saws, or knives, using steam hoses, scrapers, brushes, or oil cans.
- Cut stock manually to prepare for machine cutting, using tools such as knives, cleavers, handsaws, or hammers and chisels.
- Direct workers on cutting teams.
- Examine, measure, and weigh materials or products to verify conformance to specifications, using measuring devices such as rulers, micrometers, or scales.
- Feed stock into cutting machines, onto conveyors, or under cutting blades, by threading, guiding, pushing, or turning handwheels.
- Maintain production records, such as quantities, types, and dimensions of materials produced.
- Mark cutting lines or identifying information on stock, using marking pencils, rulers, or scribes.
- Monitor operation of cutting or slicing machines to detect malfunctions or to determine whether supplies need replenishment.
- Move stock or scrap to and from machines manually, or by using carts, handtrucks, or lift trucks.
- Operate cranes, or signal crane operators

Generalized Work Activities:

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

- Activate machines to shape or form products such as candy bars, light bulbs, balloons, or insulation panels.
- Adjust machine components to regulate speeds, pressures, and temperatures, and amounts, dimensions, and flow of materials or ingredients.
- Clean dies, arbors, compression chambers, and molds, using swabs, sponges, or air hoses.
- Clear jams, and remove defective or substandard materials or products.
- Complete work tickets, and place them with products.
- Couple air and gas lines to machines to maintain plasticity of material and to regulate solidification of final products.
- Disassemble equipment to repair it or to replace parts such as nozzles, punches, and filters.
- Examine, measure, and weigh materials or products to verify conformance to standards, using measuring devices such as templates, micrometers, or scales.
- Feed products into machines by hand or conveyor.
- Ignite burners to preheat products, or use torches to apply heat.
- Install, align, and adjust neck rings, press plungers, and feeder tubes.
- Measure arbors and dies to verify sizes specified on work tickets.
- Measure, mix, cut, shape, soften, and join materials and ingredients such as powder, cornmeal, or rubber in order to prepare them for machine processing.



to position or remove stone from cars or saw beds.

- Position stock along cutting lines, or against stops on beds of scoring or cutting machines.
- Position width gauge blocks between blades, and level blades and insert wedges into frames to secure blades to frames.
- Press buttons, pull levers, or depress pedals to start and operate cutting and slicing machines.
- Remove completed materials or products from cutting or slicing machines, and stack or store them for additional processing.
- Remove defective or substandard materials from machines, and readjust machine components so that products meet standards.
- Review work orders, blueprints, specifications, or job samples to determine components, settings, and adjustments for cutting and slicing machines.
- Select and install machine components such as cutting blades, rollers, and templates, according to specifications, using hand tools.
- Set up, operate, or tend machines that cut or slice materials, such as glass, stone, cork, rubber, tobacco, food, paper, or insulating material.
- Sharpen cutting blades, knives, or saws, using files, bench grinders, or honing stones.
- Stack and sort cut material for packaging, further processing, or shipping, according to types and sizes of material.
- Start machines to verify setups, and make any necessary adjustments.
- Start pumps to circulate water and abrasives onto blades or cables during cutting.
- Tighten pulleys or add abrasives to maintain cutting speeds.
- Turn cranks or press buttons to activate winches that move cars under sawing cables or saw frames.
- Type instructions on computer keyboards, push buttons to activate computer programs, or manually set cutting guides, clamps, and knives.
- Wash stones, using water hoses.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery

- Monitor machine operations and observe lights and gauges in order to detect malfunctions.
- Move materials, supplies, components, and finished products between storage and work areas, using work aids such as racks, hoists, and handtrucks.
- Notify supervisors when extruded filaments fail to meet standards.
- Pour, scoop, or dump specified ingredients, metal assemblies, or mixtures into sections of machine prior to starting machines.
- Press control buttons to activate machinery and equipment.
- Record and maintain production data such as meter readings, and quantities, types, and dimensions of materials produced.
- Remove materials or products from molds or from extruding, forming, pressing, or compacting machines, and stack or store them for additional processing.
- Remove molds, mold components, and feeder tubes from machinery after production is complete.
- Review work orders, specifications, or instructions to determine materials, ingredients, procedures, components, settings, and adjustments for extruding, forming, pressing, or compacting machines.
- Select and install machine components such as dies, molds, and cutters, according to specifications, using hand tools and measuring devices.
- Send product samples to laboratories for analysis.
- Swab molds with solutions to prevent products from sticking.
- Synchronize speeds of sections of machines when producing products involving several steps or processes.
- Thread extruded strips through water tanks and hold-down bars, or attach strands to wires and draw them through tubes.
- Turn controls to adjust machine functions, such as regulating air pressure, creating vacuums, and adjusting coolant flow.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- collect samples for testing
- confer with engineering, technical or manufacturing personnel
- construct molds
- examine products or work to verify conformance to specifications
- install equipment or attachments on



- cut or shape stone, tile, brick, or related material
- direct and coordinate activities of workers or staff
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- monitor production machinery/equipment operation to detect problems
- operate forklift
- operate glass or stone working equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- operate woodworking equipment/machinery
- perform safety inspections in manufacturing or industrial setting
- read blueprints
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- set up production equipment or machinery
- signal directions or warnings to coworkers
- sort manufacturing materials or products
- understand technical operating, service or repair manuals
- use hand or power tools
- use hand or power woodworking tools
- use precision measuring tools or equipment
- work as a team member

- machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- operate chemical processing equipment
- operate food processing production equipment/machinery
- operate glass or stone working equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- operate pulp or paper making equipment
- operate woodworking equipment/machinery
- read specifications
- read work order, instructions, formulas, or processing charts
- set up production equipment or machinery
- test manufactured products or materials
- use hand or power tools
- use precision measuring tools or equipment

Labor Market Comparison

Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	Difference
Median Wage	\$ 31,350	\$ 28,330	\$(3,020)
10th Percentile Wage	\$ 23,000	\$ 17,200	\$(5,800)



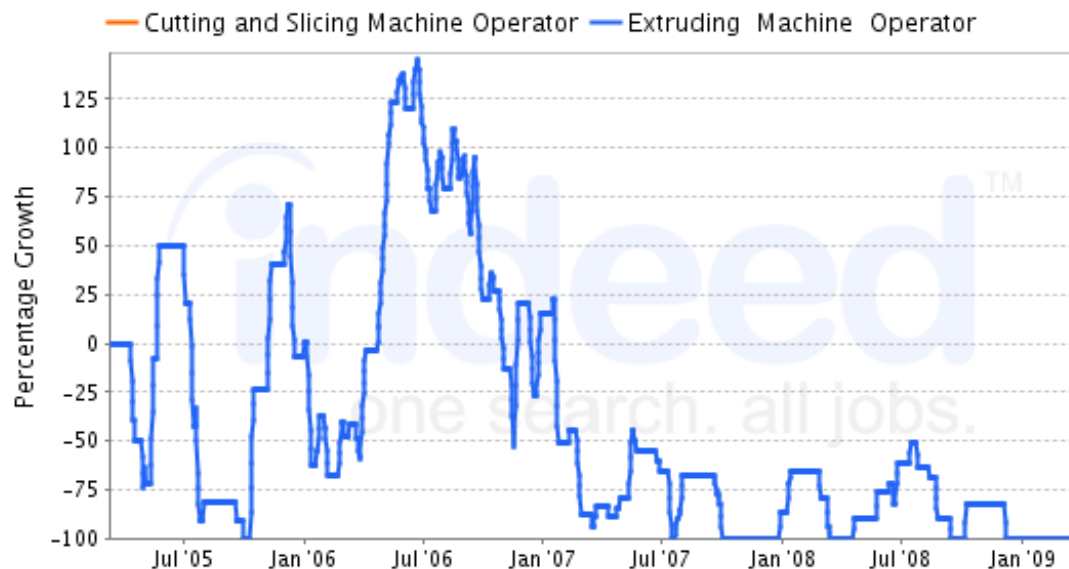
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 43,790	\$ 35,290	\$(8,500)
90th Percentile Wage	\$ 49,280	\$ 44,260	\$(5,020)
Mean Wage	\$ 34,670	\$ 29,370	\$(5,300)
Total Employment - 2007	710	260	-450
Employment Base - 2006	767	272	-495
Projected Employment - 2016	593	252	-341
Projected Job Growth - 2006-2016	-22.7 %	-7.4 %	15.3 %
Projected Annual Openings - 2006-2016	12	5	-7

National Job Posting Trends

Trend for Cutting and Slicing Machine Setters, Operators, and Tenders

Trend for Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders

Job Trends from Indeed.com



Data from [Indeed](http://Indeed.com)

Recommended Programs

Machinist/Machine Technologist

Machine Tool Technology/Machinist. A program that prepares individuals to apply technical knowledge and skills to plan, manufacture, assemble, test, and repair parts, mechanisms, machines, and structures in which materials are cast, formed, shaped, molded, heat treated, cut, twisted, pressed, fused, stamped or worked.



Institution	Address	City	URL
Central Maine Community College	1250 Turner St	Auburn	www.cmcc.edu
Central Maine Community College	1250 Turner St	Auburn	www.cmcc.edu
Eastern Maine Community College	354 Hogan Rd	Bangor	www.emcc.edu
Eastern Maine Community College	354 Hogan Rd	Bangor	www.emcc.edu
Kennebec Valley Community College	92 Western Ave	Fairfield	www.kvcc.me.edu
Kennebec Valley Community College	92 Western Ave	Fairfield	www.kvcc.me.edu
Northern Maine Community College	33 Edgemont Dr	Presque Isle	www.nmcc.edu
Southern Maine Community College	2 Fort Road	South Portland	www.smccME.edu

Sheet Metal Worker

Sheet Metal Technology/Sheetworking. A program that prepares individuals to apply technical knowledge and skills to form, shape, bend and fold extruded metals, including the creation of new products, using hand tools and machines such as cornice brakes, forming rolls, and squaring shears.

Institution	Address	City	URL
Northern Maine Community College	33 Edgemont Dr	Presque Isle	www.nmcc.edu

Maine Statewide Promotion Opportunities for Cutting and Slicing Machine Setters, Operators, and Tenders

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	100	2	710	\$31,350.00	\$0.00	-23%	12
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	90	2	910	\$38,230.00	\$6,880.00	-26%	23
51-4023.00	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	87	2	0	\$33,460.00	\$2,110.00	0%	0
51-9023.00	Mixing and Blending Machine Setters, Operators, and Tenders	86	1	420	\$36,040.00	\$4,690.00	-9%	7
51-5021.00	Job Printers	86	3	140	\$31,890.00	\$540.00	-10%	2



51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	86	2	300	\$32,980.00	\$1,630.00	-18%	9
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	86	2	850	\$38,860.00	\$7,510.00	-26%	19
51-4034.00	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	85	3	110	\$34,350.00	\$3,000.00	-9%	2
51-4121.07	Solderers and Brazers	85	2	1,610	\$38,030.00	\$6,680.00	7%	49
51-4193.00	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	84	2	120	\$32,160.00	\$810.00	16%	5
51-4191.00	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	84	2	40	\$32,470.00	\$1,120.00	-6%	1
51-9011.00	Chemical Equipment Operators and Tenders	84	2	0	\$38,790.00	\$7,440.00	-2%	5
51-2021.00	Coil Winders, Tapers, and Finishers	83	2	90	\$31,910.00	\$560.00	-53%	1
51-4032.00	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	83	2	100	\$33,030.00	\$1,680.00	-22%	2
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	82	2	120	\$36,960.00	\$5,610.00	2%	3

Top Industries for Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Rubber product manufacturing	326200	18.33%	14,883	10,510	-29.39%
Cement and concrete product manufacturing	327300	11.55%	9,375	10,176	8.55%



Plastics product manufacturing	326100	8.23%	6,685	7,086	6.00%
Glass and glass product manufacturing	327200	5.04%	4,093	3,571	-12.76%
Clay product and refractory manufacturing	327100	4.14%	3,358	3,075	-8.41%
Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	325200	3.99%	3,237	2,599	-19.73%
Converted paper product manufacturing	322200	3.67%	2,982	2,502	-16.08%
Pharmaceutical and medicine manufacturing	325400	3.01%	2,444	3,080	26.03%
Animal slaughtering and processing	311600	2.87%	2,329	2,658	14.13%
Soap, cleaning compound, and toilet preparation manufacturing	325600	2.17%	1,763	1,694	-3.92%
Veneer, plywood, and engineered wood product manufacturing	321200	2.10%	1,703	1,854	8.89%
Bakeries and tortilla manufacturing	311800	1.66%	1,350	1,379	2.15%
Sugar and confectionery product manufacturing	311300	1.59%	1,292	1,088	-15.77%
Pulp, paper, and paperboard mills	322100	1.56%	1,265	877	-30.64%
Other chemical product and preparation manufacturing	325900	1.36%	1,106	870	-21.34%

Top Industries for Cutting and Slicing Machine Setters, Operators, and Tenders

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Converted paper product manufacturing	322200	15.71%	12,381	10,390	-16.08%
Printing and related support activities	323100	12.36%	9,738	7,716	-20.77%
Plastics product manufacturing	326100	8.03%	6,327	6,707	6.00%
Pulp, paper, and paperboard mills	322100	5.55%	4,376	3,036	-30.64%
Animal slaughtering and processing	311600	5.30%	4,180	4,770	14.13%
Rubber product manufacturing	326200	4.91%	3,867	2,731	-29.39%
Glass and glass product manufacturing	327200	4.39%	3,461	3,020	-12.76%
Fruit and vegetable preserving and specialty food manufacturing	311400	2.17%	1,712	1,552	-9.33%
Other food manufacturing	311900	1.83%	1,441	1,511	4.85%
Bakeries and tortilla manufacturing	311800	1.60%	1,262	1,289	2.15%
Self-employed workers, primary job	000601	1.56%	1,230	1,311	6.54%
Dairy product manufacturing	311500	1.52%	1,197	1,185	-1.07%
Other chemical product and preparation manufacturing	325900	1.41%	1,108	872	-21.33%
Fabric mills	313200	1.06%	833	588	-29.38%
Veneer, plywood, and engineered wood product manufacturing	321200	0.81%	637	694	8.89%